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Axel E. Elfner

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HESLIN ROTHENBERG FARLEY & MESITI P.C.  
5 COLUMBIA CIRCLE  
ALBANY, NY 12203

EXAMINER

POLLACK, MELVIN H

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/791,566  
Filing Date: March 02, 2004  
Appellant(s): ELFNER, AXEL E.

\_\_\_\_\_  
International Business Machines Corp.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 24 July 2009 appealing from the Office action mailed 27 February 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2004/0010601	AFERGAN et al.	01-2004
2004/0049546	YOSHIDA	03-2004
7,219,131	BANISTER et al.	05-2007
2006/0031927	MIZUNO et al.	02-2006

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 5, 6, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afergan et al. (2004/0010601) in view of Yoshida (2004/0049546).
2. For claim 1, Afergan teaches a method (abstract) of facilitating the sending of mail from a restricted communications network (Paras. 1-20), said method comprising:
  - a. automatically checking periodically (Paras. 20-24) by a communications unit external (Fig. 4A, #406-410) to a restricted (Paras. 27-30) communications network (Fig. 4A, #400-404) whether mail (Para. 28; content particularized to example of mail server) of the restricted communications network is to be sent (Paras. 23-24); and
  - b. retrieving by the communications unit the content (Para. 28) from the restricted communications network, in response to there being mail to be sent (Paras. 21-24);
  - c. wherein the automatically checking comprises sending a request from a program of the communications unit to a program of the restricted communications network (Paras. 29-30) inquiring as to whether there is content to be sent, and wherein the

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program of the restricted communications network checks a data structure to determine whether there is content in the data structure to be sent (Paras. 23-35).

3. Afergan does not expressly disclose that the content being sent is mail messages, or that the system is checking in particular for mail messages to be sent. Yoshida teaches a method and system (abstract) of mail delivery (Paras. 1-23) through an external proxy server (Paras. 24-26) from a server on a restricted network (Paras. 27-32, 41). In particular, Yoshida checks periodically to see if there is new mail to be sent (bulk mail data 100) and retrieves it if there is (Paras. 33-39, 43). At the time the invention was made, one of ordinary skill in the art would have added Yoshida's mail server and content retrieval system to Afergan's content retrieval system with mail server embodiment in order to reduce Afergan's content network load stresses (Para. 5) and to further explain the mail server embodiment.

4. For claim 2, Afergan teaches wherein the sending of the request is via an inbound connection from the communications unit to the restricted communications network over an available port (Paras. 27-39, with emphasis on Paras. 28-29 and 32-34).

5. For claim 3, Afergan teaches that the retrieving comprises having the program of the restricted communications network serve the mail to the program of the communications unit via the available port (Paras. 27-39, with emphasis on Paras. 28-29 and 32-34).

6. For claim 5, Afergan teaches that the retrieving comprises having the program of the restricted communications network provide the mail in the data structure to the communications unit (Para. 28).

7. For claim 6, Afergan teaches providing the mail to the data structure (Para. 28).

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8. For claim 8, Afergan teaches forwarding the mail (Para. 28) from the communications unit to one or more receivers (Paras. 23-24).

9. For claim 10, Afergan teaches that a receiver of the one or more receivers comprises an intermediary to facilitate forwarding the mail to an intended recipient of the mail (Paras. 23-24).

10. For claim 11, Afergan teaches that the forwarding comprises parsing the mail into one or more messages and sending the one or more messages to the one or more receivers (Paras. 21-25).

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Afergan and Yoshida as applied to claims 1, 6 above, and further in view of Banister et al. (7,219,131).

12. For claim 7, Afergan and Yoshida do not expressly disclose that the providing is performed by a queue program of the restricted communications network, and wherein the queue program receives the mail from another program of the restricted communications network, said another program capable of receiving mail from one or more communications units of the restricted communications network. Banister teaches a method and system (abstract) of determining e-mails for appropriate delivery (col. 1, line 1 - col. 5, line 65; col. 20, line 33 - col. 28, line 25) that includes delivery decision making procedures (col. 5, line 65 - col. 20, line 33), and includes the queuing procedure (col. 10, line 50 - col. 12, line 40). At the time the invention was made, one of ordinary skill in the art would have added these features in order to protect from the security problem known as spam (col. 2, line 50 - col. 3, line 5).

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13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Afergan and Yoshida as applied to claims 1, 8 above, and further in view of Mizuno et al. (2006/0031927).

14. For claim 9, Afergan and Yoshida do not expressly disclose that a receiver of the one or more receivers comprises an intended recipient of the mail. Mizuno teaches a method and system (abstract) of transferring communications data (Paras. 1-25) from a restricted network to an external server (Paras. 26-30) that includes this limitation (Paras. 31-34). At the time the invention was made, one of ordinary skill in the art would have added Mizuno in order to improve seamless access to files behind an Afergan firewall (Paras. 13-14).

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Afergan and Yoshida as applied to claims 1, 8, 11 above, and further in view of Clarke et al. (7,043,240).

16. For claim 12, Afergan and Yoshida do not expressly disclose that the manner in which a message is sent to a receiver is dependent on the type of receiver. Clarke teaches a method and system (abstract) of providing the messages (col. 1, line 1 – col. 3, line 55) that comprise the limitations (col. 3, line 55 – col. 7, line 30). At the time the invention was made, one of ordinary skill in the art would have added Clarke's receivers in order to handle a variety of legacy protocols (col. 1, lines 15-55).

#### **(10) Response to Argument**

Applicant's arguments filed 24 July 2009 have been fully considered but they are not persuasive. An analysis of the arguments is provided below, but they have also been addressed in

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the final rejection dated 27 February 2009 and in the non-final rejection dated 15 August 2008 and in the advisory action dated 01 May 2008.

I. THE CITED ART OF AFERGAN AND YOSHIDA ARE ANAOLOGOUS ART IN LIGHT OF THE LAW AS PROPERLY INTERPRETED.

The claims are drawn towards the retrieval by a user of content from a restricted (secure) communications network. While the content happens to be mail, no limitation discusses the particular transmission and there is no particular structure or function that makes this retrieval different from the retrieval of any other content. The structure and function of the restricted communications network also remains broad, as does the process of requesting and receiving content updates.

In response to applicant's argument that neither Afergan nor Yoshida is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the issue is how to interpret the meaning of these terms, with the applicant arguing that it cannot be in the field of the applicant's endeavor nor pertinent to the problem unless it is a 102 rejection. It is the position of the examiner that the applicant reads the test too narrowly. Furthermore, it is the position of the examiner that the applicant is incorrect in his assertion that determining



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analogousness involves looking at the reference alone (P. 7), as determining analogousness is dependent on the scope of the claims as currently drawn.

Determining what art is analogous depends on the necessary essential function or utility of the subject matter covered by the claims, and not upon what it is called by the applicant. See MPEP 904.01(c)[R-5], arguing that a concrete mixer is analogous to a tea mixer and that a biscuit cutting machine is analogous to a brick cutting machine. In determining the necessary essential function or utility, claims must be given their broadest reasonable interpretation in light of the knowledge of one of ordinary skill in the art. See MPEP 2111 [R-5]. "Any need or problem known in the field of endeavor at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed." See MPEP 2141.01(a)[R-6], citing *KSR International Co. v. Teleflex, Inc.*, 82 USPQ2d 1385 at 1397 (2007). See also *In re Ellis*, 476 F.2d 1370 at 1372 (CCPA 1973), which states that one must look primarily at the similarities in structure and function between the claims and the art, and secondarily at classification and search.

Courts have upheld that, in interpreting the analogousness of the art, one must decide whether it is in the "field from that of the inventor's endeavor" or "because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." See *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992). One must further keep in mind that "familiar items may have obvious uses beyond their primary purposes." See *KSR International Co. v. Teleflex, Inc.*, 127 S.Ct. 1727 at 1742. In doing so, we must look to see

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where the claimed invention makes its particular focus. See *In re Icon Health and Fitness, Inc.*, 496 F.3d 1374, 1378-1380, (Fed. Cir. 2007). *Icon* found that a folding bed art was analogous art to reject a folding treadmill, despite coming from a different field, because it addressed the application's problem. *Id* at 1380. In doing so, the court in *Icon* noted that the claims, despite mentioning treadmills, were focused more broadly on the issue of supporting the weight of the folded portion and providing "a stable resting position. Analogous art to *Icon*'s application, when considering the folding mechanism and gas spring limitation [of a folding treadmill], may come from any area describing hinges, springs, latches, counterweights or other similar mechanisms – such as the folding bed [with coil springs instead of gas springs]." *Id*. As a final consideration, we must consider that “while perhaps not dispositive of the issue, the finding that *Teague*, by addressing a similar problem, provides analogous art to *Icon*’s application goes a long way towards demonstrating a reason to combine the two references.” *Id* at 138-1381. This is consistent with the textual cannon of keeping analogousness tests separate from motivation tests so as to avoid redundancy.

Courts have further considered analogousness broadly. In determining the hinge and latch mechanism for a desktop, one may look towards desktop telephone directories, piano lids, kitchen cabinets, washing machine cabinets, wooden furniture cabinets, and audio-cassette storage. *In re Paulsen*, 30 F.3d 1475, 1481-1482 (Fed. Cir. 1994). See also *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, 82 USPQ2d 1687 (Fed. Cir. 2007), *In re Bigio*, 381 F3d 1320 (Fed. Cir. 2004), and *Daiichi Pharmaceutical Co. v. Apotex Inc.*, 83 USPQ2d 1471 (D.N.J. 2006).

In response, applicant relies primarily on *In re Wood and Eversole*, 599 F.2d 1032 (CCPA 1979), but takes several statements outside of their proper context. In this case, the court found that references relating to subsonic variable venturi carburetors are within the field of endeavor with sonic variable venturi carburetors and to variable venturi apparatus for mixing and modulating liquid fuel and intake air for internal combustion engines. *Id* at 1036. It is true that the court used the Background section of the application to show that the *applicants* considered the art to be within the field of endeavor, based on the breadth of the statement regarding the field of invention. However, the case does not bar other tests or evidentiary considerations for determining the field of endeavor, nor does it require subjective knowledge on the behalf of the applicants in regards to the field of endeavor. The case is silent in regards to the issue of finding a similar problem.

Courts have also found, as a matter of policy, that 103 should place some burdens upon the applicant. "We presume full knowledge by the inventor of all the prior art in the field of his endeavor. However, with regard to prior art outside the field of his endeavor, we only presume knowledge from those arts reasonably pertinent to the particular problem with which the inventor was involved." *Id* at 1036. This concept forms a bar to which the applicants must meet, in exchange for some fairness from the examiner. However, it is necessary to prevent patents from issuing on "concepts within the public grasp, or so obvious that they readily could be." See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.* 481 U.S. 141 (1989).

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Applicant argues that neither Afergan and Yoshida are within the field of endeavor, because we must take as gospel the field as laid out in the preamble of the claim and of the background of the invention (Page 8, Para. 3). Even if “field of the invention” were a completely subjective test, the applicant would fail in this case. It is true that both the preamble and the background section mention sending of mail from restricted communications networks. However, neither discusses any particulars of the mail system, i.e. that the difficulties of sending mail are different from the difficulties of sending other content. In fact, the background identifies as the problem that, “in a restricted communications network, standard mechanisms for sending *data as* electronic mail are disabled *due to* security concerns. However, there are many occasions in which *data* needs to be sent from a restricted communications network (Para. 2, emphasis added).” In other words, the field of endeavor is sending content (data) from a restricted network.

One must also look at the scope and focus of the claims, the similarities between the claims and art, and the classification of the invention. An overview of the claims indicates wide breadth and a focus towards circumventing security as opposed to delivering mail. The applicant has conceded, by raising few 103 challenges, that Afergan in view of Yoshida teaches most of the limitations. Afergan is classed in 709/229 (network resources access controlling), 709/218 (remote data accessing using interconnected networks), and 713/200 (network security at the time of filing), which are all valid classes for a case that focuses primarily on retrieving any data from a secured network. Afergan teaches much of the structure of both the independent and dependent claims, as demonstrated above.

Even if we accept *argumendo* that the field of endeavor is sending of mail from a restricted network, Afergan would remain in the field of endeavor. It is without question that Afergan teaches sending of content from a restricted network. Afergan clearly adds that “the inventive ‘shielding’ technique protects a site’s Web servers (as well as backend infrastructure, such as application servers, databases, and *mail servers*) from unauthorized intrusion (Para. 28, emphasis added).” Yoshida is even more clearly in this field of endeavor, as it is drawn to sending mail from restricted network (proxies and authentication, see abstract) and is classed in 709/206 (email).

Applicant then argues that Afergan is not within the field of endeavor because the user requests do not come from a restricted network (P. 8, Para. 4), and that Yoshida does not come within the field of endeavor because the server response does not come out of a restricted network (P. 9, Para. 3). Applicants further argue that Yoshida is outside the field of endeavor of sending email because the art is within the field of endeavor of receiving email and getting email to recipients. *Id.* The examiner finds this argument quite disconcerting. First, it is clearly contradictory and almost cynical. Second, it fails even the applicant's test, since the field of invention says nothing about users being or not being in a restricted network and since it is presumable by the examiner that the field of sending email would include the field of receiving email and the field of getting email to recipients. Third, the test of field of endeavor is not whether the art teaches every limitation of the claims.

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The art also meets the test of pertinence to the particular problem. Applicant argues that Afergan is not pertinent because it is concerned with shielding the content server from inbound access (P. 9, Para. 1). Applicant then argues that Yoshida is not pertinent because it is concerned with receiving email, not sending email (P. 10, Para. 1). In determining what the art is concerned with, applicant has cherry picked the issues that the art is focused on, without even considering the corollaries to their descriptions. In the case of Yoshida, art concerned with receiving email is presumably considered to be concerned with sending email, since the email must come from somewhere. In the case of Afergan, it is true that the art, like any art involving a secured network, is concerned with protecting content servers (i.e. mail servers) from outside threats. But unless the sole purpose of the network is to keep anyone from ever accessing the content, any such art must also be concerned with allowing proper responses of content to get around the protections.

Afergan teaches that “the present invention relates generally to techniques for cloaking a Web site origin server from the public Internet while still ensuring that content otherwise available from the site is delivered quickly and without fail, regardless of a user location (Para. 1)... It is a primary object of the present invention for "cloaking" a Web site from the public Internet while still ensuring that content is delivered quickly and without fail, regardless of user location. The incentive technique substantially eliminates the public entry points found on Web servers today while delivering end users of a protected site unparalleled performance and reliability (Para. 7)... As a result, bona fide end-users will always be able to retrieve content from edge servers with maximal performance and reliability while the origin remains protected

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(Para. 11)." In other words, Afergan is clearly concerned with the problem of sending (mail) content through a restricted network while avoiding many of the problems, and one of ordinary skill in the art would recognize that "requiring manual intervention" raises problems of performance and reliability.

Yoshida is drawn towards "a technology for reducing the load on a server providing electronic mail sending and receiving services to mail clients (Para. 1)." Yoshida then continues to outline the problems and solutions of sending email through a network (Paras. 7-10). While it is true that Yoshida's primary concern is processing load, Yoshida is also concerned with mail delivery around a secured network's protections (Para. 37) so that manually setting ports is not required (Para. 41).

If the applicants are found correct that Afergan or Yoshida is not analogous art, then the policy result would be that patentability would be based on the intended use of the invention and on the potentially narrower background section limitations of the specification. It would make the analogous test narrower than the test for motivation and require that every cited art contain nearly every limitation in the claims. By raising the 103 bar significantly higher, the court would also make it more difficult for the examiners to protect the public from losing rights. Such a test would also be ripe for abuse, i.e. the applicant's competitors could use a narrow background to argue that none of applicant's current patents are analogous art. In such a scenario, the competitor could then craft his claims broadly such that the value of the applicant's current and future patents decreases significantly. Finally, such a test would result in a legal argument over

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every piece of art cited in any 103 rejection, leading to greater time and resource expenditures for both applicant and examiner, and further leading to an increase of appeals based around the increasingly difficult standard.

If the examiner is found incorrect, the applicant may amend around Afergan and Yoshida simply by adding one or two limitations that better clarify the invention. In fact, the applicant could have made Afergan and Yoshida non-analogous art simply and cheaply by narrowing the claims, and might have gotten a valid patent less prone to the above outlined risks, long before this appeal was filed. A broad analogous art test also benefits both the public and the applicant by ensuring that subsequent patents will not lessen their current property rights and by ensuring that the examiner can focus on issues like proper interpretation and motivation.

Similar arguments may be made for Banister (P. 19), Mizuno (P. 21), and Clarke (Pp. 21-22). Banister is classed in 709/206 and teaches placing restrictions (filters) on mail delivery. Mizuno is classed in 726/11 (network security) and is concerned with sending content (if not email specifically) through a network. Clarke is classed in 709/206 and teaches sending email from a restricted network to a public (wireless) network.

Therefore, the art should be found analogous on the basis of law, facts and policy. The examiner should be upheld on the basis that the art is analogous.



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II. THERE IS SUFFICIENT MOTIVATION TO COMBINE AFERGAN AND YOSHIDA, AND THE APPLICANT IS INCORRECT AS TO THE TEST OF BODILY INCORPORATION.

In response to applicant's argument that Afergan and Yoshida may not be combined (P. 11), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, even if Afergan focused solely on shielding the server from incoming requests and Yoshida focused solely on disseminating outgoing mail, and the examiner has demonstrated that this is not in any way the case, there would still be sufficient motivation to combine. In this case, one of ordinary skill in the art would recognize the significant benefit of improving Afergan by applying the lessons of Yoshida: an Afergan network with greater shielding and protection, and with a lower resource stress on the network. In the alternative, the combination is also valid under KSR, since Yoshida shows that mail networks face a finite number of possibilities that are obvious to try.

III. THE EXAMINER HAS PROPERLY FOUND ALL LIMITATIONS CITED IN THE CLAIMS, AND THE BROAD CLAIMS AS CURRENTLY DRAWN ARE UNPATENTABLE IN LIGHT OF THE CITED INVENTION.

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In response to applicant's argument that the references fail to show certain features of applicant's invention, the applicant is reminded that the claims must be given their broadest reasonable interpretation in light of the specification and in light of the knowledge of one of ordinary skill in the art. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The applicant is further reminded that he must interpret Afergan in view of Yoshida in light of the art as a whole, and that the test is whether the structure and function of the art matches the structure and function of the claim limitation, regardless of the terminology.

Applicant argues that Afergan does not expressly disclose "automatically checking periodically whether mail is to be sent... wherein the automatically checking comprises sending a request (inquiry) from a program" to a program on another machine that checks a data structure (claim 1, Pp. 11-12). The examiner is required to read "automatically checking periodically" in the broadest reasonable interpretation in light of the rest of the claim, and in light of the specification and the knowledge of ordinary skill in the art. External units (CDNs) constantly (automatically and periodically) request information from the internal units (origin servers) based on end-user requests, and the origin server determines whether there is content to be sent, i.e. if the content is stale (Paras. 24-25). The use of IP addresses and metadata is to help the CDN make these automatic and periodic requests – to determine what the CDN should check for (Paras. 9-11).

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Applicant argues that the user requests are not relevant, since they are not periodic. Applicant has defined automatically checking to include all types of end-user requests, whether caused by a subroutine or by a pressing of a button. That said, the point of the structure is not merely to protect the origin servers but to accelerate content delivery, meaning that content is delivered even when no end-user requests are forthcoming.

Applicant concedes the periodic delivery of metadata, but argues that this is periodic pushing, not periodic pulling. In doing so, the applicant misunderstands the use of metadata, which is based on the earlier requests, and is further used to prime requests.

Applicant then argues that the various components are part of the same network, on the grounds that servers located in “another region” of a content delivery network “can access the shielded origin server ‘under restricted, secure circumstances (Pp. 12-13).’” Once again, the term “external to the network” is to be read broadly. While it is true that a network may have multiple regions or domains, the applicant’s failure to describe external to the network requires a recognition that external to the network could be any logical or physical separation.

Alternatively, one of ordinary skill in the art would recognize “external to a restricted communications network” as having a component in the public sphere and a second component within a private, protected sphere, i.e. one component on the Internet and a second in a LAN (Figs. 1, 3, 4A; Paras. 22, 28-29, 38-39). This separation is consistent with the claimed invention, in which the external communications unit may access the restricted communications network, but only under secure circumstances.

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Applicant's argument that communication under restricted, secure circumstances proves they are on the same network is false, as it actually proves they are on different networks. "The origin server is 'shielded' from the publicly-routable IP address space. Preferably, only given machines (acting as clients) can access the origin server, and then only under restricted, secure circumstances." If the components were on the same network, one of ordinary skill in the art would recognize that most machines would be allowed to access the origin server under less restricted circumstances, because they would all be on the private, protected network. The secure restricting of the machines means that they must be on different networks.

Applicant then digresses into issues of ingoing v. outgoing mail (Pp. 13-14), which is not in the claims. The examiner has considered the possibility that the applicant is reading the claims narrowly, i.e. that the external communications unit wants to send email, rather than receive email, from other users, and the restricted communications network sends it to a second communications unit under certain circumstances. While such an interpretation is possible, it is not the broadest reasonable interpretation known to one of ordinary skill in the art. In fact, the claims focus on restricted communications networks and on sending requests for mail to be sent would focus the mind of one of ordinary skill in the art that the claims are about a restricted communications network receiving and protecting email until it is ready to be delivered. For this argument to have any relevance to the claims at issue, the claims must be amended to add structure and function.

At any event, the applicant misconstrues the functionality of Afergan, as shown in the above discussion as to whether there is automatic, periodic checking.

Applicant then turns to Yoshida, in regards to network protection (P. 14). While Yoshida is secondary art, the examiner will provide evidence that Yoshida teaches these limitations.

The applicant argues that Yoshida does not expressly disclose “retrieving by the communications unit the mail from the restricted communications network, in response to there being mail to be sent.” This term must be given its broadest reasonable interpretation. While it is true that the external communications networks have firewalls, it has been shown (Fig. 1) that the mail server is on a restricted network via proxies and authentication. Furthermore, the claims are not drawn to the specifics of the restricted network, nor are they drawn to the timing issues of whether they must be prior or simultaneous to email transfer.

Even if the claims are read narrowly so as to include “outgoing restrictions” on the protected network, Yoshida would teach this limitation. Yoshida is drawn towards sending mail from a communications unit on external network 1 to a communications unit on external network 2 via the restricted communications network. Yoshida further teaches restrictions to this “outgoing” communications, i.e. sending the mail only to the proper recipients at the proper time and rate. Once again, the claims must be read in light of the applicant’s failure to properly add structure and function to the claims when given multiple chances.

IV. THE EXAMINER HAS SHOWN THE LIMITATIONS OF ALL DEPENDENT CLAIMS AND THEREFORE SHOULD BE AFFIRMED, AS OPPOSED TO AFFIRMED IN PART.

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Regarding claim 2, applicant argues that “available port” should be interpreted as a port which is not blocked (P. 15).” One of ordinary skill in the art would understand “available port” to mean that it is available to the communication at present, not one that is available to all communications, and that it therefore includes embodiments wherein it is available to this communication (predetermined IP addresses not blocked) but not to others (other addresses blocked). Applicant concedes in his quote that some ports are completely blocked, which would make the other ports available. Furthermore, Afergan makes clear that IP address ACLs are one possible embodiment; and such filtering might not be performed in a case of dedicated servers and firewalls.

Regarding claim 5, applicant argues that Afergan does not expressly disclose “having the program of the restricted communications network provide (send) the mail in the data structure to the (external) communications unit (P. 15).” Once again, the applicant relies solely on his misinterpretation of Afergan as doing nothing but protecting servers from outside attacks. As described multiple times, the purpose of Afergan is to send content, i.e. mail, outside of the network, albeit in a controlled manner.

Regarding claim 6, applicant argues that Afergan does not expressly disclose “providing the mail to the data structure (P. 16),” arguing that the database is separate from the mail server. First, data structure must be read broadly to include more than databases, including disk drives and other storage. Second, the list of backend infrastructure, listing application servers, databases, and mail servers, is not supposed to be interpreted such that the mail server may not

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be a database. In fact, it should be read as similar enough to be included as two species of a genus.

Regarding claims 8 and 10, Applicant argues that Afergan does not expressly disclose “forwarding the mail from the communications unit to one or more receivers (Pp. 16-17).” Applicant reads this limitation broadly and in light of the erroneous readings of claim 1 and of Afergan, as discussed above in the section on independent claims. The examiner interprets “forwarding” as merely sending the content outside of the protected network, in this case to a proxy server that will send the content to the end user. Everything else flows as previously described.

Regarding claim 11, applicant argues that Afergan does not comprise parsing the mail into multiple messages (P. 18). Content, contrary to the applicant's belief, is delivered in bulk, i.e. to populate the cache, and then sent via individual files. Furthermore, the term “parsing” must be read broadly, as must what would be considered multiple messages of content.

Regarding claim 7, applicant argues that Banister does not comprise that the queue receives and sends content, despite the existence of a queuing procedure (Pp. 19—20). The argument again relies on the interpretation of the claims and of the art. Examiner reads the claims in that the mail, before being sent to the external unit, should go through a queue. The teaching shows this thoroughly (col. 10, line 50 - col. 12, line 40).



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Finally, regarding claim 9, applicant argues that Mizuno is not concerned with email and that the network is not externally restricted (Pp. 20-21). In response to applicant's argument that Mizuno is not concerned with email, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Mizuno clearly shows a restricted network, and content sent to a receiver (the external communications unit) to which the content is intended. Again, the applicant seems to be misinterpreting the claims and the art.

V. FOR THE REASONS ABOVE, THE REJECTION SHOULD BE MAINTAINED  
AND THE EXAMINER SHOULD BE AFFIRMED BY THE COURT.

The applicant's arguments ultimately comprise a misinterpretation of the claims as currently drawn, of the art as currently applied, and of the legal standard of which we must uphold. Every piece of cited art is analogous, and the applicant's arguments otherwise are concerning. When properly interpreting the claims and the art, it becomes clear that every limitation is taught, and that there is sufficient motivation to combine the art. Therefore, the court should uphold the rejection and affirm the examiner.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Melvin H. Pollack

/Melvin H Pollack/

Examiner, Art Unit 2445

Conferees:

/VIVEK SRIVASTAVA/

Supervisory Patent Examiner, Art Unit 2445

/Patrice Winder/

Primary Examiner, Art Unit 2445